

Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS



Motor type : 1CV4310C

SIMOTICS SD - 315 S - IM B5 - 6p

Client order no.	Item-No.	Offer no.
Order no.	Consignment no.	Project
Remarks		

Electrical data

Safe Area

U	Δ / Y	f	P	P	I	n	M	η ³⁾			cosφ ³⁾			I _A /I _N	M _A /M _N	M _K /M _N	IE-CL
[V]		[Hz]	[kW]	[hp]	[A]	[1/min]	[Nm]	4/4	3/4	2/4	4/4	3/4	2/4	I _I /I _N	T _I /T _N	T _B /T _N	
DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50	75.00	-/-	135.00	992	720.0	95.4	95.6	95.2	0.84	0.79	0.69	8.2	2.7	3.5	IE4
690	Y	50	75.00	-/-	78.00	992	720.0	95.4	95.6	95.2	0.84	0.79	0.69	8.2	2.7	3.5	IE4
460	Δ	60	75.00	-/-	118.00	1193	600.0	95.8	95.7	94.9	0.83	0.78	0.67	9.2	3.1	3.9	IE4
460	Δ	60	90.00	-/-	139.00	1192	720.0	95.8	96.0	95.7	0.85	0.81	0.72	8.0	2.5	3.3	IE4
IM B5 / IM3001			FS 315 S				IP55	UKCA		IEC/EN 60034							
Environmental conditions : -20 °C - +40 °C / 1000 m									Locked rotor time (hot / cold) : 25 s 33.9 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	63 / 77 dB(A) ^{2) 3)}	65 / 79 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	3.1800 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	6319 C3	6319 C3	Thermal class	F
permissible lateral force on (N) (N)	X ₀ : 10600	X _{0.5} : 9900	X _{max} : 9200	Duty type
bearing lifetime			Direction of rotation	
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾			bidirectional	
40000 h			Frame material	
32000 h			cast iron	
Relubrication interval/quantity DE NDE			Net weight of the motor	
40 g 40 g			879 kg	
6000 h			Coating (paint finish)	
Lubricants			Special paint finish C3	
UNIREX N3			Color, paint shade	
Regreasing device			RAL7030	
with conical grease nipple acc. DIN 71412A			Motor protection	
Grease nipple			3 PTC thermistors - for tripping (2 terminals)	
M10x1 DIN 71412 A			Method of cooling	
Locating bearing DE			IC411 - self ventilated, surface cooled	
Bearing insulation DE / Bearing insulation NDE			'SIMOTICS Connect 400' in IP65	
Yes (Non-drive end)			No	
Condensate drainage holes			(Standard) Yes	

Terminal box

Terminal box position	box at the top	Max. cross-sectional area	240 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	38 mm - 45 mm
Type of terminal box	TB1Q61	Cable entry	2xM63x1,5 - 2xM20x1,5
Contact screw thread	6xM12	Cable gland	4 plugs

Notes:

I_A/I_N = locked rotor current / current nominal 1) L10mh according to DIN ISO 281 10/2010 3) Value is valid only for DOL operation with motor design IC411

M_A/M_N = locked rotor torque / torque nominal 2) at rated power / at full load

M_K/M_N = break down torque / nominal torque

responsible dep.	technical reference	created by	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents	
DI MC LVM		DT Configurator					
SIEMENS	document type			document status			
	datasheet			released			
	title			document number			
	1LE5504-3AC03-4FB4-Z						
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F74	Sheet steel fan cowl	M11	Stainless steel rating plate
L19	Regreasing device with regreasing nipple M10X1 acc.to DIN 71412-A	R52	Drilled removable entry plate
L51	Bearing insulation NDE	S02	Special paint finish C3

Notes:

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